Salmosyst® Broth Base

For the two-step enrichment of sublethally injured salmonellae, especially from foodstuffs and feeds.

Mode of Action

All the microorganisms present in the sample material are enriched during non-selective pre-enrichment in Salmosyst® Broth Base. Following the addition of the selective reagents in the form of a Salmosyst® Selective Supplement tablet, the growth of the accompanying organisms is inhibited, but the salmonellae continue to grow.

Composition of the Broth Base (g/litre)

Peptone from casein 5.0; peptone from meat 5.0; sodium chloride 5.0; calcium carbonate 10.0.

pH: 7.1 ± 0.2 at 25 °C.

Preparation of the Broth Base

Dissolve 25 g/litre, autoclave (15 min at 121 °C). A visible white precipitation of calcium carbonate which then appears does not affect the performance of the broth. During long storage of the prepared broth some of the calcium carbonate dissolves and can lead to a minimal increase in pH.

Preliminary Enrichment

Suspend 25 g sample material (if necessary homogenize) in 225ml broth base and incubate for 6-8 hours at 35 °C. Transfer 10ml of the culture to a sterile test tube.

Selective Enrichment

Add one tablet of Salmosyst® Selective Supplement to the 10ml of the preliminary enrichment culture and leave to stand for 30minutes. Shake vigorously and then incubate for further 18-22 hours at 35 °C. In order to detect the salmonellae, streak a sample of the resulting enrichment culture onto appropriate selective culture media. Identify the resulting colonies.

Literature

WEBER, A.: Über die Brauchbarkeit von Salmosyst ® zur Anreicherung von Salmonellen aus Kotproben von Tieren. - **Berl. Münch. Tierärztl. Wschr., 101**; 57-59 (1988).

OSSMER, R.: Salmosyst® and RAMBACH-Agar. A Rapid Alternative for the Detection of Salmonella. Congress-Poster - Salmonella and Solmonellosis-Ploufragan/Saint-Brieux - France, Sepetember 1992.

Ordering Information

Product	Merck Cat. No.	Pack size
Salmosyst® Broth Base	1.10153.0500	500 g
Salmosyst® Selective Supplement	1.10141.0001	250 tablets

Quality control (incl. supplement)

Test strains	Growth
Salmonella typhimurium ATCC 14028	good
Salmonella dublin ATCC 15480	good
Escherichia coli ATCC 25922	inhibited
Enterococcus faecalis ATCC 19433	inhibited